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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Peter Schuller

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EXAMINER

WILLIAMS, ARUN C

ART UNIT

PAPER NUMBER

2838

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/563,866	SCHULLER, PETER	
	Examiner	Art Unit	
	ARUN WILLIAMS	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 34.35 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 19-33 is/are rejected.
- 7) ☒ Claim(s) 11-17, and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/9/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-33 in the reply filed on 10/8//2008 is acknowledged.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

3. Claim 5 in line 2 recites the limitation "the second conversion"; there in insufficient antecedent basis for this limitation in the claim.
4. Claim 24 in line 2-3 recites the limitation "the inductive means"; there in insufficient antecedent basis for this limitation in the claim

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the a plurality of rechargeable batteries, first conversion, second conversion, switch, shunt impedance, and etc.. must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

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number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 7,19,24-32, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Divan et al,(Divan), USPAT5,659,237.

As for claim, 1 Divan discloses and shows in Fig. 4 a power management system for supplying power to an output circuit comprising: a plurality of rechargeable batteries (72,74, and 76); first conversion means (78) for converting a supply voltage(Vdc) to a battery voltage to enable charging of one or more of the plurality of rechargeable

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batteries; and switch means (88) to enable a selected battery of the plurality of rechargeable batteries to be connected to the output circuit (124) to enable the selected battery to be discharged through the output circuit (124). (col.23, lines 42-58)

As for claim 2, Divan shows in Fig. 4 switch means (88) is connected to the first conversion (84) means to enable charging to the selected battery.

As for claim 3, Divan show in Fig. 4 second conversion (92) means connected between the output circuit and the switch means (88) for converting the voltage of the selected battery to a voltage for use by the output circuit thereby discharging the selected battery.

As for claim 4, Divan discloses a rechargeable battery of the plurality of rechargeable batteries is chosen, one at a time, in order to be charged or discharged (col.23, lines 42-58)

As for claim 5, Divan shows in Fig. 4 first conversion means acts as the second conversion means.

As for claim 7, Divan discloses comprising a control unit (64) for controlling the switch means to either enable charging or discharging of a rechargeable battery of the plurality of rechargeable batteries. (col.8, lines 30-42)

As for claim 19, Divan discloses and shows in Fig. 4 second conversion (92) means enables discharging of a battery of the plurality of rechargeable batteries such that charge in the selected battery of the plurality of rechargeable batteries is forwarded to the output circuit.

As for claim 24, Divan disclose and shows in Fig. 4 supply voltage (Vac) is derived from an inductive means and rectified into a direct voltage (Vdc) to be applied to the inductive means of the first conversion means (within element 78).

As for claims 25-32, and 33, the method will be necessitated in view of the device as disclosed in the rejection of claims 1,2, and 7 above, since the structure recited in "Divan" is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent. Or where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 195 USPQ 430 (CCPA 1977) and MPEP 2112.01.

According, claims 25-32, and 33 would have been inherent.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Divan in view of Ashtiani et al,(Ashtiani), USPAT6,078,165 .

As for claim 8, Divan differs from the claimed invention because he does not explicitly disclose that multiplexer means having an input connected to one terminal of each rechargeable battery in the plurality of rechargeable batteries to enable the voltage signals pertaining to each battery to be selected and forwarded to an analogue to digital converter.

Ashtiani discloses and shows in Fig. 1 multiplexer (21) means having an input connected to one terminal of each rechargeable battery in the plurality of rechargeable batteries (B1-B48) to enable the voltage signals pertaining to each battery to be selected and forwarded to an analogue to digital converter (23) (col.3 , lines 53-60)

Ashtiani is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use multiplexer means having an input connected to one terminal of

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each rechargeable battery in the plurality of rechargeable batteries to enable the voltage signals pertaining to each battery to be selected and forwarded to an analogue to digital converter.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Divan by using multiplexer means having an input connected to one terminal of each rechargeable battery in the plurality of rechargeable batteries to enable the voltage signals pertaining to each battery to be selected and forwarded to an analogue to digital converter for advantages such as providing the ability to inform other component (col.3, lines 58-59) as taught by Ashtiani.

As for claim 6, Diven discloses the claimed invention except for the switch means comprises a plurality of switches enabling connection of a respective rechargeable battery of the plurality of rechargeable batteries to the first conversion means and to the output circuit. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to the switch means comprises a plurality of switches enabling connection of a respective rechargeable battery of the plurality of rechargeable batteries to the first conversion means and to the output circuit, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

**7. Claim 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Divan in view of Ashtiani and further in view of Perelle et al,(Perelle),
USPAT6,043,628**

As for claim 9, Divan in view of Ashtiani differs from the claimed invention because he does not explicitly disclose that a shunt impedance means connected to the other terminal of each battery in the plurality of rechargeable batteries to measure the charge current of each battery, represented as a voltage drop across the shunt impedance means.

Perelle discloses and shows in Fig. 1 a shunt impedance(7) means connected to the other terminal of each battery in the plurality of rechargeable batteries(2) to measure the charge current of each battery, represented as a voltage drop across the shunt impedance means (col.3, lines 54-67)

Perelle is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use a shunt impedance means connected to the other terminal of each battery in the plurality of rechargeable batteries to measure the charge current of each battery, represented as a voltage drop across the shunt impedance means.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the Divan in view Ashtiani by using a shunt impedance means connected to the other terminal of each battery in the plurality of rechargeable batteries to measure the charge current of each battery, represented as a voltage drop across the shunt impedance means for advantages such as providing the ability to balance the cells (col.2, line 62), as taught by Perelle.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Divan and Ashtiani in view of Perelle and further in view of Peterson, USPAT3,902,078

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Claim 10, Divan and Ashtiani in view of Perelle differs from the claimed invention because he does not explicitly disclose the shunt impedance means is connected in parallel to a shunt switch to short circuit the shunt impedance means when the shunt impedance is not in use.

Peterson discloses and shows in Fig. 1 the shunt impedance (10) means is connected in parallel to a shunt switch (18) to short circuit the shunt impedance means when the shunt impedance is not in use (col.2, lines 16-28)

Peterson is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use the shunt impedance means is connected in parallel to a shunt switch to short circuit the shunt impedance means when the shunt impedance is not in use

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the Divan and Ashtiani modified by Perelle by using the shunt impedance means is connected in parallel to a shunt switch to short circuit the shunt impedance means when the shunt impedance is not in use for advantages such as providing to control the circuit in a periodic manner (col.2, lines 28-30), as taught by Peterson.

9. Claims 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Divan in view of Crosby et al,(Crosby), USPAT4,532,930

As claim 20, Divan differs from the claimed invention because he does not explicitly disclose that output circuit forms part of an implantable device.

Crosby discloses and shows in Fig. 2 output circuit forms part of an implantable device (ref's cochlear implant system).

Crosby is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use output circuit forms part of an implantable device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Divan by using output circuit forms part of an implantable device for advantages such as providing electrical stimulation for a suffering person (col.6, lines 59-61), as taught by Crosby.

As claim 21, Divan differs from the claimed invention because he does not explicitly disclose the implantable device is an implantable hearing prosthesis.

Crosby discloses and shows in Fig. 2 the implantable device is an implantable hearing prosthesis. (ref's cochlear implant system).

Crosby is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use the implantable device is an implantable hearing prosthesis.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Divan by using the implantable device is an implantable hearing prosthesis for advantages such as providing electrical stimulation for a suffering person (col.6, lines 59-61), as taught by Crosby.

10. Claims 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Divan in view of Blacker, USPAT6,340,879

As claim 22, Divan differs from the claimed invention because he does not explicitly disclose that first conversion means includes an inductive means, one or more

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switches and a switch control unit to enable charging and/or discharging of a selected battery of the plurality of rechargeable batteries.

Blacker discloses and shows in Fig. 2 first conversion means includes an inductive (L1) means, one switches (s1) and a switch control (CC) unit to enable charging and/or discharging of a selected battery of the plurality of rechargeable batteries (E1-En)(col.5,lines 38-49).

Blacker is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use first conversion means includes an inductive means, one or more switches and a switch control unit to enable charging and/or discharging of a selected battery of the plurality of rechargeable batteries.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Divan by using first conversion means includes an inductive means, one or more switches and a switch control unit to enable charging and/or discharging of a selected battery of the plurality of rechargeable batteries for advantages such as providing the ability of the circuit of operate in extreme low temperatures (col.3, line 5) , as taught by Blacker.

As claim 23, Divan differs from the claimed invention because he does not explicitly disclose second conversion means includes an inductive means, one or more switches and a switch control unit to enable discharging of a selected battery of the plurality of rechargeable batteries.

Blacker discloses and shows in Fig. 2 second conversion means includes an inductive means (L1), one switches(S1) and a switch control unit (CC) to enable

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discharging of a selected battery of the plurality of rechargeable batteries.

(E1-En)(col.5,lines 38-49).

Blacker is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use first conversion means includes an inductive means, one or more switches and a switch control unit to enable charging and/or discharging of a selected battery of the plurality of rechargeable batteries.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Divan by using first conversion means includes an inductive means, one or more switches and a switch control unit to enable charging and/or discharging of a selected battery of the plurality of rechargeable batteries for advantages such as providing the ability of the circuit of operate in extreme low temperatures (col.3, line 5), as taught by Blacker.

Allowable Subject Matter

11. Claims 11-17 and 18 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun Williams whose telephone number is 571-272-9765. The examiner can normally be reached on Mon - Thrus,6:30am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on 571-272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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